

interface and the host system to ascertain if the given communication interface corresponds to the communication interface of the host system.

Claim 22 (original): The device of claim 21, wherein said interface configuration mode of operation is carried out when the device is initially powered up.

Claim 23 (original): The device of claim 21, wherein, in said interface configuration mode of operation, upon detecting that said given communication interface corresponds to the communication interface of the host system, the interface configuration mode of operation ends, thereby enabling subsequent data communication between the bar code symbol reading device and the host system over the given communication interface.

Claim 24 (original): The device of claim 21, wherein said host system is selected from the group comprising: an electronic cash register system, a data collection device, and a data storage and/or processing device.

Claim 25 (original): The bar code symbol reading device of claim 1, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wireless data link between the device and the host system.

Claim 26 (original): The device of claim 25, wherein said wireless data link is selected from the group comprising: an infra-red link, a Bluetooth RF link, and an IEEE 802.11b RF link.

Claim 27 (original): The device of claim 21, wherein at least one communication interface implemented by the data transmission subsystem and the communication interface of the host system provides a wired serial data link between the device and the host system.

Claim 28 (original): The device of claim 27, wherein said wired serial data link is selected from the group comprising: a keyboard wedge link, an RS-232 link, USB link, an IEEE 1394 link, an RS-422 link, and a RS-485 link.

Claim 29 (original): The device of claim 21, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wired parallel data bus.

Claim 30 (original): The device of claim 21, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wired communication link selected from the group comprising: an OCIA link, an IBM 46XX link, a Light Pen Emulation link, and a LTPN link.

Claim 31 (original): The device of claim 21, wherein the data transmission subsystem maintains a status register that stores information related to the establishment of a communication link between the data transmission subsystem and the host system over a specific interface implemented by the data transmission subsystem, and wherein, in the interface configuration mode of operation, the data transmission subsystem reads said information stored in said status register to ascertain if the given communication interface corresponds to the communication interface of the host system.

Claim 32 (original): The device of claim 21, wherein, in the interface configuration mode of operation, the data transmission subsystem tests the signal levels of the given communication interface to ascertain if the given communication interface corresponds to the communication interface of the host system.

Claim 33 (original): The device of claim 21, integrated in a base unit that mechanically supports a hand-holdable bar code symbol reading device that houses said bar code symbol reading engine.

Claim 34 (original): The device of claim 21, integrated into a communication adapter operably coupled between a bar code symbol reading device that houses said bar code symbol reading engine and said host system.

Claims 35-55 (canceled)

Claim 56 (original): A bar code symbol reading system comprising:

- a host system;

- a bar code symbol reading device including a bar code symbol reading engine that reads bar code symbols affixed to objects proximate thereto and produces symbol character data representative of such bar code symbols;

- a data transmission subsystem, operably coupled between the bar code reading engine and the host system, that communicates such symbol character data to a communication interface of a host system over a communication link therebetween, wherein said data transmission subsystem implements a plurality of different communication interfaces and wherein, during an interface configuration mode of operation, the data transmission subsystem automatically cycles through at least one of said plurality of different communication interfaces whereby, for a given communication interface, the data transmission subsystem selectively activates the given communication interface while disabling the other communication interfaces and tests the communication link between the given communication interface and the host system to ascertain if the given communication interface corresponds to the communication interface of the host system.

Claim 57 (original): The bar code symbol reading system of claim 56, wherein said interface configuration mode of operation is carried out when the device is initially powered up.

Claim 58 (original): The bar code symbol reading system of claim 56, wherein, in said interface configuration mode of operation, upon detecting that said given communication interface corresponds to the communication interface of the host system, the interface configuration mode of operation ends, thereby enabling subsequent data communication between the bar code symbol reading device and the host system over the given communication interface.

Claim 59 (original): The bar code symbol reading system of claim 56, for use as a point of sale system, a data collection device, or a data storage and/or processing device.

Claim 60 (original): The bar code symbol reading system of claim 56, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wireless data link between the device and the host system.

Claim 61 (original): The bar code symbol reading system of claim 60, wherein said wireless data link is selected from the group comprising: an infra-red link, a Bluetooth RF link, and an IEEE 802.11b RF link.

Claim 62 (original): The bar code symbol reading system of claim 56, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wired serial data link between the device and the host system.

Claim 63 (original): The bar code symbol reading system of claim 62, wherein said wired serial data link is selected from the group comprising: a keyboard wedge link, an RS-232 link, USB link, an IEEE 1394 link, an RS-422 link, and a RS-485 link.

Claim 64 (original): The bar code symbol reading system of claim 56, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wired parallel data bus.

Claim 65 (original): The bar code symbol reading system of claim 56, wherein at least one communication interface implemented by the data transmission system of the device and the communication interface of the host system provides a wired communication link selected from the group comprising: an OCIA link, an IBM 46XX link, a Light Pen Emulation link, and a LTPN link.

Claim 66 (original): The bar code symbol reading system of claim 56, wherein the reading of a bar code symbol and subsequent communication of the symbol character data corresponding thereto to the host system occurs automatically without the need for human interaction to activate such operations.

Claim 67 (original): The bar code symbol reading system of claim 56, wherein the reading of the bar code symbol occurs automatically without the need for human interaction to activate such operation, and the subsequent transfer of the symbol data corresponding thereto to the host system is manually-activated by a user interaction with a data transmission switch.

Claim 68 (original): The bar code symbol reading device of claim 56, wherein the reading of the bar code symbol and the subsequent transfer of the symbol data corresponding thereto to the host system is manually-activated by a user interaction with a trigger mechanism.

Claim 69 (original): The bar code symbol reading system of claim 56, wherein the data transmission subsystem maintains a status register that stores information related to the establishment of a communication link between the data transmission subsystem and the host system over a specific interface implemented by the data transmission subsystem, and wherein, in the interface configuration mode of operation, the data transmission subsystem reads said information stored in said status register to ascertain if the given communication interface corresponds to the communication interface of the host system.

Claim 70 (original): The bar code symbol reading system of claim 56, wherein, in the interface configuration mode of operation, the data transmission subsystem tests the signal levels of the given communication interface and the host system to ascertain if the given communication interface corresponds to the communication interface of the host system.

Claim 71 (original): The bar code symbol reading system of claim 56, wherein said bar code symbol reading engine is selected from the group comprising: a laser-based bar code reading

system, a CCD-based bar code symbol reading devices that illuminate the bar code scanning field with an LED light source, and a CCD-based bar code symbol reading devices that illuminate the bar code scanning field with a planar laser illumination beam.

Claim 72 (original): The bar code symbol reading system of claim 56, wherein said bar code symbol reading device comprises a hand-holdable scanner.

Claim 73 (original): The bar code symbol reading system of claim 56, wherein said bar code symbol reading device comprises a presentation scanner.

Claim 74 (original): The bar code symbol reading system of claim 56, wherein said bar code symbol reading device comprises an in-counter scanner.

Claim 75 (original): The bar code symbol reading system of claim 56, wherein said bar code symbol reading device comprises a wearable scanner.